UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,184	12/04/2003	Ghislain Lefevre	1948-4826	2383
	7590 07/25/200 INNEGAN, L.L.P.		EXAMINER	
	ANCIAL CENTER		PADGETT, MARIANNE L	
NEW TORK, I	N1 10201-2101		ART UNIT	PAPER NUMBER
			1792	
			NOTIFICATION DATE	DELIVERY MODE
			07/25/2008	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com Shopkins@Morganfinnegan.com jmedina@Morganfinnegan.com

		Application	No.	Applicant(s)		
Office Action Summary		10/729,184		LEFEVRE ET AL.		
		Examiner		Art Unit		
		MARIANNE	L. PADGETT	1792		
The MAILING DATE o Period for Reply	f this communication a	ppears on the c	over sheet with the c	correspondence ad	ldress	
A SHORTENED STATUTOR WHICHEVER IS LONGER, - Extensions of time may be available to after SIX (6) MONTHS from the mails - If NO period for reply is specified abo - Failure to reply within the set or extent - Any reply received by the Office later earned patent term adjustment. See	FROM THE MAILING inder the provisions of 37 CFR ig date of this communication. We, the maximum statutory perioded period for reply will, by statithan three months after the mai	DATE OF THIS 1.136(a). In no event od will apply and will e ute, cause the applica	S COMMUNICATION, however, may a reply be tin expire SIX (6) MONTHS from tion to become ABANDONE	N. nely filed the mailing date of this c D (35 U.S.C. § 133).		
Status						
<ul> <li>1) ⊠ Responsive to community</li> <li>2a) ⊠ This action is FINAL.</li> <li>3) ☐ Since this application closed in accordance</li> </ul>	2b)∏ Tr s in condition for allow	nis action is nor ance except fo	r formal matters, pro		e merits is	
Disposition of Claims						
4)	(s) is/are withdo allowed. <u>nd 32</u> is/are rejected. objected to.	rawn from cons	ideration.			
Application Papers						
9) The specification is obj 10) The drawing(s) filed on Applicant may not reque Replacement drawing sh 11) The oath or declaration	is/are: a) ☐ action and action and action to the eet(s) including the corre	ccepted or b) ne drawing(s) be ection is required	held in abeyance. See if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 Cl	• •	
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO- 2) Notice of Draftsperson's Patent D 3) Information Disclosure Statement Paper No(s)/Mail Date	rawing Review (PTO-948)	_	)  Interview Summary Paper No(s)/Mail Da )  Notice of Informal F )  Other:	ate		

Art Unit: 1792

1. Applicants' amendment to specification of 4/3/2008 appears to have to be corrected new matter & clarity problems, as discussed in sections 3 & 7 of the action mailed 10/3/2007, while the amendments to the claims canceled claims 1-5 & 29-30, such that rejections applied thereover are moot, however some of the concepts as previously discussed with respect to claims 1+5 or claims 19-20 depending from a previously broader claims 17, remain relevant to new claim 32. Similarly, a independent claims 17 & 28 have been amended so as to move previous 112, first & second problems, with addition of limitations related to those previously found in one or more of a than now canceled claims 1-4, 22 & 24-25.

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al. (2002/0071940 A1), in view of Shaffer et al. (5,817,243).

Arnold et al. (abstract; [0011-17, especially [0012, 15 & 17]; [0019-24], especially [0023]; [0035-37]; [0041-45], especially [0044-45]; [0053-58], especially [0056-58] & claims) teach making multilayered shaped articles, where the shaped article may be metallized for EMI shielding, decorative

Page 3

Art Unit: 1792

&/or reflective purposes, explicitly teaching the usefulness of their multilayered structures as reflectors for automotive vehicles, and mentioning use for improved reflective surfaces such as in lamp housings, vehicle reflectors or headlights, etc. ([0035]; [0043] & [0053]). Arnold et al. teaches metallization &/or decoration may be done before or after shaping of the film to be metallized & optionally decorated (metallization may be the decoration or decoration may be additional, possibly an additional metal layer). However, Arnold et al. provides reasons relating to the integrity of the film for why it may be beneficial to shape before metallizing or to complicated designs for decoration after metallization. Note in Arnold et al., the film layers that are metallized, where the forming of the final completed object is done by injection molding to create the body of the object, with the film/component & its metallized layer(s) attached during the injection molding process, can be considered to read on components as contemplated in applicants' claim 32, although not relating to specific design choices, such as employing headlamp reflectors with symmetrical elliptical the shapes, so but that a single mold can be used for both right & left side reflectors. Note that in order to provide the shielding feature to the electrical products (consider to be inclusive of the taught headlights housing & reflectors, where housing is considered a possible meaning of mask), with which Arnold et al.'s multilayered structures are used, it is taught that the metallized layer is grounded with a "ground trace", which may be attached by various methods, inclusive of laser melting or laser heating, that is used to melt or soften a portion of the metal layer that disposed over the ground trace ([0024] & [0064]), hence showing compatibility with laser processing.

While Arnold et al. teaches reflective surfaces used with headlights, as well as lamp housings & vehicle reflectors explicitly, as well as teaching the possibility of decorative effects employed with their process, they do not teach a particular shape of lamp housing or explicitly that the lamp housing is for headlights, hence right & left side headlamp reflectors, nor do they teach decorating or modifying their headlights via patterning of the reflective metal used on housing or reflector parts, nor doing so via laser ablation. With respect to the taught lamp housings, it would have been obvious to one of ordinary skill in

the art to have applied this teaching to the taught reflective parts for headlights, considering the teachings on chrome like finishes for vapor deposited aluminum & vehicle reflectors being listed alongside both lamp housings & headlights, and to thus employ conventional shapes of structures made to hold vehicle headlights or taillights, which would have been required to have an orifice for the headlight lens, in order to be functional.

Respect to the injection molded components for right & left side headlight reflectors being identical, this is considered a design consideration dependent on whether or not one desires the pair of headlights to be identical shapes or mirror images of each other, either of which option would have been expected to be included in standard design choices, as would an elliptical shape for headlight reflector, hence the claim of identically molded components is not considered to be of patentable significance due to obvious known style variations employed by the automotive industry. The examiner further notes that performing the metal patterning via laser ablation has no particular significance to the limitation of employing a single mold for right & left side headlamp reflectors, especially considering there is no particular differentiation between the claimed ablation employed on either headlamp reflector, however if such were to be claimed, then tailoring the ablation for the specific enduse, i.e. side vehicle on which the reflector is to be position, would have been a matter of engineering competence & determined by known optical reflection requirements for a effectiveness and safety.

As previously discussed, **Shaffer et al.** teach creating decorative contrast designs on motorcycle and automobile parts, that employ a laser scanning process with pulsed lasers, such as YAG, CO<sub>2</sub> and excimer lasers, where the parts to be treated include molded translucent or transparent plastic substrates that are for automobile or motorcycle light globes and lenses, or <u>mirrored</u> glass, etc. It is taught that parts may be directly etched, or plated with metal and then laser ablated to affect taught designs, where the effect of such designs will have masking or transmissive or reflective effects. See the abstract; figure 1; col. 1, line 6-15 & 35-63; col. 2, lines 8-39, with lines 20-39 particularly directed mirrored parts that are

laser ablated to remove coatings from a surface of the mirror  $\equiv$  reflector; col. 3, line 63-col. 4, lines 1-34, 43-53 & 61-67; col. 5, lines 1-14; examples on col. 6-8, especially example 1, 3 & 5. Examiner notes the inherent effect of using the taught laser fluence to remove the front or coated back from a mirror surface, as Shaffer et al. in creating designs, would have been expected to be removal of reflective surfaces, as the coatings are generally what supply the reflective nature, such that one of ordinary skill in the art would have expected the effect on the reflective to be that when reflective coatings are removed from mirror surfaces, those surfaces are no longer reflective.

With respect to employing decoration & designs on vehicle light structures, Shaffer et al. discussed above provides teachings & motivation concerning the desirability of decorating car part structures, including those related to the headlights, and including to do so via metallization that is to be ablated in order to form desired design with transparent & opaque regions, thus it would have been obvious to one of ordinary skill in the art, to employ such decorative techniques on the metallized car parts that are headlight parts, such as reflectors or housing as suggested in Arnold et al., as it is consistent with the primary references suggestion that their technique may also be directed to decorative effects in combination with any of the other effects, especially considering Arnold et al.'s teachings concerning the advisability in many situations of providing the decorative effects after shaping &/or metallization. Note that as decorative effects are optical in nature, they are an optical function, as generically claimed.

Also while particular reflector shapes for headlights are not discussed by Arnold et al., one of ordinary skill in the art would have been expected to employ any known or conventional reflector shape, inclusive of the claimed elliptical interface, with the process as suggested by this combination of references.

With respect to discussion of Shaffer et al., applicants argued that "Shaffer's laser etching...*not* altering the light transmission characteristics of the plastic part" (bottom half of page 18, 7/24/2007 response), but then provide a quote from Shaffer (col. 5, lines 1-14) which says "when the part material is

Art Unit: 1792

plastic... the laser may desirably leave etched areas opaque to enhance the overall decorative contrast of the design...will not adversely affect the transmission of the light beam", which clearly does not mean what applicant asserts, as "not adversely affecting" is an entirely different meaning than the asserted "not altering", with the cited opaque areas clearly being equivalent to the claimed mask for the claims as written. Considering that "mask" is not a term that has any specific known or required meaning with respect to headlights or the like, and applicants' specification (page 6, lines 1-3) includes teachings their "masks" can provide aesthetic effects, so Shaffer's teachings appear to be quite consistent with the claims as written.

4. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (6,521,326 B1), and in view of Shaffer et al. discussed above in section 3.

Fischer et al. (abstract; col. 11, lines 29-36; col. 14, lines 60-col. 15, lines 65, especially lines 19 & 60-62; col. 16, lines 25-57, especially 35-47; and col. 17, lines 1-10) teach molding compositions taught to be particularly suitable for automobile construction, useful with any molding technique, with injection molding preferred, especially teaching parts that will be exposed to heat, specifically mentioning ones that will have metallization for reflecting surface properties, and further discussing use with various headlamp components, such as housings, frames, retainers & guides. Fischer et al. further teach that their composite structures having good heat stability are preferably applicable to laser inscription, again noting preference for use on exterior & interior motor vehicle parts (col. 17, lines 1-10). However, while implied applicable to any taught parts, Fischer et al. do not explicitly say that the laser scribing is employed on the taught headlamp components, but it would have been alternately obvious to one of ordinary skill in the art to employ the suggested laser scribing, on these suggested substrates, for such conventional reasons as inscribing serial numbers on the parts or the like. Also while Fischer et al. explicitly teach their process for the reflective parts of headlights, they do not actually call them "headlamp reflectors", however since this is a required & standard part of a headlight & suggested by the

context of Fischer et al.'s disclosure, it would have been abundantly evident to one of ordinary skill in the art that reflectors were one of the components being discussed.

As discussed above, with respect to the injection molded components for right & left side headlight reflectors being identical, this is considered a design consideration dependent on whether or not one desires the pair of headlights to be identical shapes or mirror images of each other, either of which option would have been expected to be included in standard design choices, as would an elliptical shape for headlight reflector, hence the claim of identically molded components is not considered to be of patentable significance due to obvious known style variations employed by the automotive industry. The examiner further notes that performing the metal patterning via laser ablation has no particular significance to the limitation of employing a single mold for right & left side headlamp reflectors, especially considering there is no particular differentiation between the claimed ablation employed on either headlamp reflector, however if such were to be claimed, then tailoring the ablation for the specific enduse, i.e. side vehicle on which the reflector is to be position, would have been a matter of engineering competence the & determined by known optical reflection requirements for effectiveness and safety.

With respect to the taught laser scribing, when considered with respect to the taught metallized headlamp parts, the teachings of Fischer et al. do not indicate whether the laser scribing would have been preformed before or after metallization, however as previously discussed in Shaffer et al. (section 3 above), it has been seen that laser produced designs on either coated mirror (reflective) surfaces for vehicles, or in plastic parts can be performed on the plastics itself, hence could have been reasonably before metallization, or can be performed on metal layers deposited on plastic, so as to ablate & produce a design, i.e. suggestive of an inscription, hence it would have been obvious to one of ordinary skill in the art to apply the laser techniques of Shaffer et al. in order to perform the suggested laser inscription processes of Fischer et al. on their taught headlamp components substrates, either before or after metallization, depending on where the desired inscription is to be placed & under what conditions it is

intended to be visible. Note with respect to headlamp components for left & right, which are otherwise identical in shape, due to style (or economy) considerations, any pattern differentiations would have been expected to occur at this point.

5. Claims 6, 17, 28 & 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (6,521,326 B1), in view of Shaffer et al. discussed above in sections 3-4 up, and further Reiss et al. (6,017,138) and Lamprecht et al. (4,954,422)...

With respect to "headlamp mask" or masks associated with headlamps, while Fischer et al. do not use like phrasing &, which to the examiner's knowledge has no actual or standard meaning in the art, Fischer et al.'s teachings of headlamp housings, frames, retainers & guides, were all considered to read on possible meanings of applicants claimed "mask" in light of the apparent general context of applicants' specification, or alternately were obvious due to the similarity of probable meanings, as suggested by applicants' figures. In applicants' amend claims, claimed 17 is now directed to "a mask for motor vehicle headlamps", with description that the mask is made from a component "defining at least one orifice for holding a motor vehicle headlamp lens", thus is considered to remain consistent with the previous discussion repeated above.

While the combination of Fischer et al. & Shaffer et al. provides teachings concerning laser scribing in general up, including by metal ablation & laser treating the plastic substrate for patterning effects, it does not provide a teaching of actually texturing the plastic substrate for creating a matt effect via such texturing, whether or not metal is actually ever deposited on the texturized portion, which now is required in both the claim 28 & 17 sequences. However, Reiss et al. (detailed discussion below) provides motivation for providing opaque or nonreflecting (i.e. equivalent to dull or matt) patterning on metal parts of headlamps, particularly particular sections of the reflector &/or metal frame (called masks), where Lamprecht et al. (col. 1, lines 47-52) in its background provides a teaching on a known laser technique for reducing reflectance by laser texturized a plastic substrate, and having a metal layer then applied via

Art Unit: 1792

vapor deposition, which would provide an alternative laser scribing technique that may be used for the teaching thereof in Fischer et al., especially in view of Shaffer et al.'s teachings with respect to analogous plastic substrates, to provide an alternative means of patterning the plastic consistent with their combined processing procedures & motivated by Reiss et al., which would reasonably have been expected to provide the type of surface taught as required by Reiss et al., in order to prevent parasitic reflections, as its use would reduce the reflectance of light by the applied metal at desired surface locations as would have been suggested to one of ordinary skill in the art by teachings of Reiss et al. to thus eliminate the parasitic reflection.

Reiss et al. provides an alternate reason for producing patterning on reflectors for affecting optical functions, such as their teaching of three distinct zones, which may be discontinuous, as well as their teachings concerning shadow zones, which are opaque deposits, the purpose of which is to prevent problems from parasitic light in motor vehicle headlamps. Also Reiss et al., being to the same assignee as the present application, can be considered in its discussion of "masks" to provide further probable meanings for applicants' claimed masks, noting that they may be parts with metal surfaces that surround the lamp. See abstract; figures 1-2+; col. 1, lines 5-13 & 34-col. 2, lines 16; col. 4, lines 46-col. 5, line 12+; and col. 9, lines 39-44. Note concerning parasitic light rays, this reference would have provided a motivation for employing the laser patterning of the above combinations in order to affect reflective properties of taught headlamp components, so as to avoid parasitic light problems.

- 6. Reiss et al. (6,017,138), was & remains considered cumulative to the above rejections of Arnold et al. or Fischer et al., either in view of Shaffer et al., in sections 3 & 4 given discussion as incorporated in section 5 above.
- 7. Applicant's arguments filed 4/3/2008 & discussed above have been fully considered but they are not persuasive.

Art Unit: 1792

Applicants' specific arguments with respect to Reiss et al. & Lamprecht et al. as if they were stand-alone references, however they were not applied to stand by themselves, but as a combination of ternary references, which provide known concepts and means applicable to reflector surfaces. Applicants to appear further contend on pages 16-18 that in order for a reference to be applicable to their claims, it must be directed to motor vehicle headlamp reflectors, which is extraordinarily unconvincing, as it is not only one issue that may make a reference analogous prior art. Teachings concerning properties of & production of reflective surfaces used with most light sources would have been found by the reasonably competent practitioner to be relevant to the making of reflectors for most types of lamp sources, whether they go with headlights, or discharge lamps, etc., as the concepts of needing to reflect for direction &/or focus &/or control of light is analogous to all such usages, where only the details of the particular end uses specific design requirements (not relevant to the generic processing procedures of that texturing or metal ablation) would vary dependent on end uses.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1792

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The

examiner can normally be reached on M-F from about 9:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where

this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Marianne L. Padgett/ Primary Examiner, Art Unit 1792

MLP/dictation software

7/20/2008